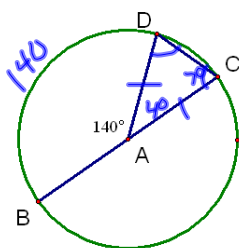
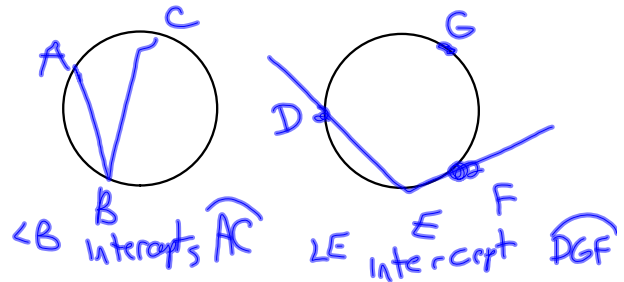


10-4 Inscribed Angles

Inscribed angle--angle whose vertex is on the circle and whose sides contain chords of the circle



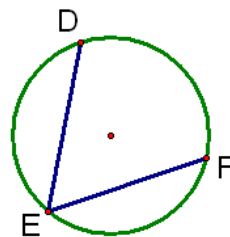
Name the inscribed angle in the picture. $\angle BCD$

What arc does it intercept? \widehat{BD}

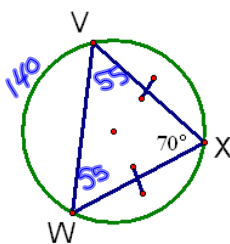
What is the measure of the intercepted arc? 140°

What is the measure of the inscribed angle? 70°

Theorem 10-5--The measure of an inscribed angle is $= \frac{1}{2}$ the measure of the intercepted arc.



$$m\angle E = \frac{1}{2} m\widehat{DF}$$



$$m\widehat{VW} = 140$$

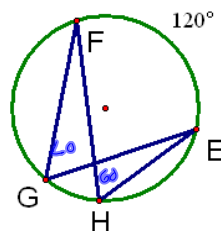
$$m\angle W = 55$$

$$m\widehat{VX} = 110$$

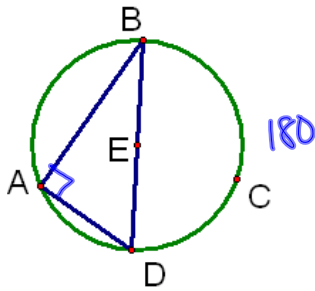
$$m\angle VWX = 55$$

$$m\angle VWX = 55$$

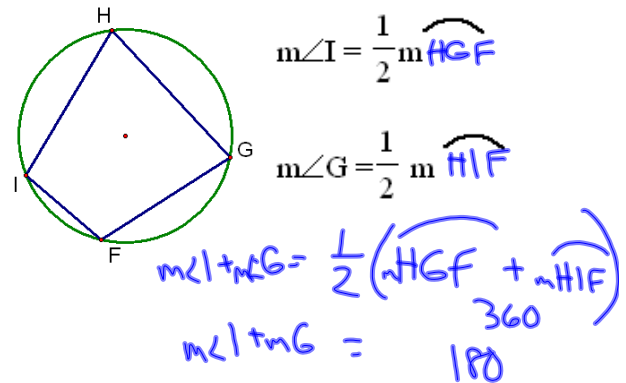
Theorem 10.6--If 2 inscribed angle intercept the same arc, then the angles are congruent.



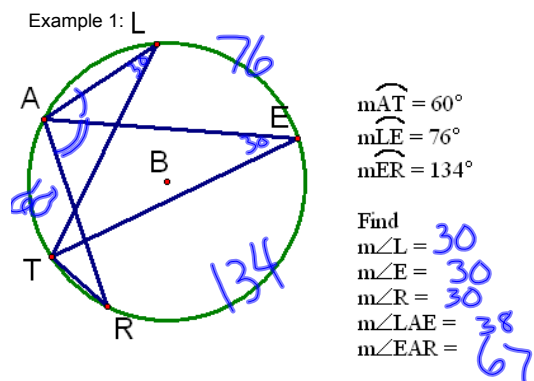
$$\angle G \cong \angle H$$



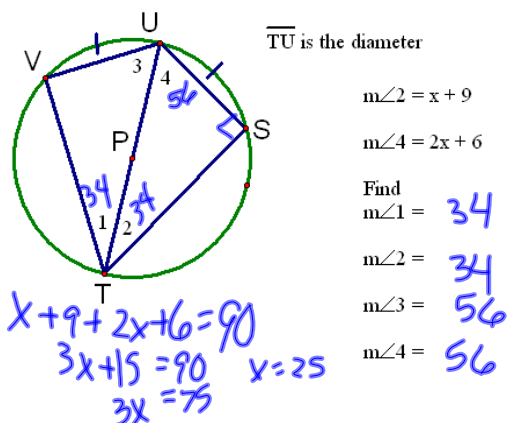
Theorem 10-7--An angle inscribed in a semicircle is a right angle.



Theorem 10-8--If a quadrilateral is inscribed in a circle, then its opposite angles are supplementary



Example 2:



Example 3:

